



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

AC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,845	11/13/2001	Kuan-Chang Peng	MR3003-7	6176

4586 7590 09/12/2003

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER

MCCAMEY, ANN M

ART UNIT PAPER NUMBER

2833

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,845

Applicant(s)

PENG, KUAN-CHANG

Examiner

Ann M McCamey

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claim 28 is indefinite because there is an inconsistency between the claims. Claim 22 does not positively recite the overhang portion. However, claim 28 contains positive limitations directed toward the overhang portion, suggesting that applicant intends to claim the entire combination. Applicant is required to clarify what subject matter the claim is intended to be drawn to and the language of the claim must be amended to be consistent with this intent.

For purposes of examination, limitations drawn toward a feature not positively recited will not be given patentable weight.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2833

Claims 22, 24-26, 28-30, 32-38, 40 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagayama et al. (US 6,137,220).

Regarding claim 22, Nagayama et al. disclose an organic electro-luminescence device (Fig. 2c) comprising:

- (a) a substrate 102;
- (b) a plurality of elongate first electrodes 103 formed on a surface of said substrate;
- (c) a plurality of organic layer divisions 106 formed on said first electrodes to extend transversely relative thereto, each said organic layer division including at least one organic electro-luminescent layer, said organic layer divisions being spaced one from the others;
- (d) a plurality of second electrodes 107 formed respectively on said organic layer divisions; and,
- (e) a plurality of rampart portions 104, 105, 107 each disposed adjacent at least one of said organic layer divisions, each rampart portion extending upward from said first electrodes to support an overhang portion, each said rampart portion having a plurality of sections including a bottom insulating pad section 104 or 105 and a heat sink section 107 formed of a conductive material.

Regarding claim 24, Nagayama et al. disclose said bottom insulating pad section of each said rampart portion being greater in thickness than said organic layer divisions.

Regarding claim 25, Nagayama et al. disclose an overlaying protective layer 112.

Art Unit: 2833

Regarding claim 26, Nagayama et al. disclose a plurality of spaces being defined between said protective layer and said rampart portion, beneath each said overhang portion.

Regarding claim 30, Nagayama et al. disclose each said second electrode being less in width than each said organic layer division.

Regarding claim 32, Nagayama et al. disclose a plurality of spaces being defined between said protective layer and said rampart portion, beneath each said overhang portion.

Regarding claim 33, Nagayama et al. disclose each said heat sink section being formed with a trapezoidal shape, each said heat sink section being greater in width at a top part thereof than a bottom part thereof.

Regarding claim 34, Nagayama et al. disclose said organic layer divisions including a red light emitting organic layer division, a green light emitting organic layer division, and a blue light emitting organic layer division.

Regarding claim 35, Nagayama et al. disclose each said heat sink section being formed of a metallic material.

Regarding claim 36, Nagayama et al. disclose said bottom insulating section being greater in width than said heat sink section.

Regarding claim 37, Nagayama et al. disclose each said second electrode extending laterally between said bottom insulating pad sections of adjacent ones of said rampart portions.

Art Unit: 2833

Regarding claim 38, Nagayama et al. disclose said bottom insulating pad section being greater in thickness than each said organic layer division.

Regarding claim 40, Nagayama et al. disclose said bottom insulating pad section being greater in width than said bottom part of said heat sink section.

Regarding claim 41, Nagayama et al. disclose each said second electrode extending laterally between said bottom insulating pad sections of adjacent ones of said rampart portions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 27, 31, 39, 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. in view of Yamana (US 6,249,084).

Nagayama et al. disclose the invention substantially as claimed, but do not disclose the bottom insulating pad being moisture absorbent or the section between the heat sink and bottom insulative pad being moisture absorbent. Yamana teaches the use of moisture absorbent insulation film materials for EL devices to prevent moisture from entering the organic film through the interface between the organic film and the lower electrodes. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use moisture absorbent insulating materials in the

Art Unit: 2833

device of Nagayama et al. to decrease the effects of moisture on the EL characteristics and improving reliability of the light-emitting elements (Column 6, Lines 15-25).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann M McCamey whose telephone number is (703) 305-3422. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone

Art Unit: 2833

number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AMM

A handwritten signature in black ink, appearing to read 'RL', is positioned above the printed name and title.

RENEE LUEBKE
PRIMARY EXAMINER